

Make Better Decisions after Attending

Decision Analysis Course ("DAC," ALMC-RD)

and Risk Analysis Course ("RAC," ALMC-RB)



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or See Our Web Page at http://www.almc.army.mil/sed/almc-da/index.asp

General: Each course is one week in length and consists of lectures, classroom exercises and graded group workshops. Participants learn to choose and use modern techniques that aid problem solving at *any* governmental level.

Prerequisites and Grading: The Decision Analysis Course ("DAC," ALMC-RD) has only basic high school mathematics and elementary PC skills as prerequisites. However, the prerequisite for the Risk Analysis Course ("RAC," ALMC-RB) is satisfactory completion of DAC—or one of its near equivalents: DRAC (ALMC-DA) or DAL/DRALOG (ALMC-DC).

There are not any graded examinations in either DAC or RAC. However, each student must attend classes and actively contribute to several graded group exercises for a "Satisfactory" grade in each course.

Registration: Apply through your local training officer and ATRRS, or contact ALMC at 804-765-4965/4633 (DSN 539-), email antolj@lee.army.mil or tittlee@lee.army.mil.

Costs: For attendance at resident DAC and RAC offerings at ALMC (Fort Lee, VA), a government employee is only responsible for individual travel and per diem costs.

Onsite offerings instead require a local computer classroom with black/white boards, an instructor computer connected to a color projector and a printer, as well as one computer for each PAIR of students that includes at least MS Windows 3.1 and MS Office 97. For greater than a dozen students, a nearby "breakout room" is also needed for the frequent workshops in DAC and RAC.

The host for onsite offerings must also advance to ALMC the total amount for travel, shared rental car and government per diem for two senior ALMC instructors--and also the costs for student materials and software (approximately \$675 per course, up to a maximum of 20 students). Thus, the typical FY2002 CONUS reimbursable cost to ALMC for back-to-back DAC and RAC onsite offerings is about \$6000, or \$150 per student per week.

(Note that ALMC foregoes the \$1350 materials/software costs for "regular onsite government customers" who consistently enter their onsite requirements for DAC and RAC well in advance into the Army's TACCITS system.)

An added ALMC rate of \$332 per week always applies to each non-governmental attendee, such as a contractor.

(See next page for course details....)



ALMC DAC and RAC Course Details

Decision Analysis Course ("DAC," ALMC-RD):

Provides participants with modern insights and fundamental abilities for aiding government decisions at any level.

Prerequisites: Completion of high school mathematics, and ability to create shortcuts and create and save simple text documents in the MS Windows PC environment.

Major Topics: Overview of statistics, data collection and probability for decisions; Single-Attribute & Multiple-Attribute Decisions, Sensitivity and Software; PERT/CPM Networks for Cost and Time Decisions; Contemporary Decision Analysis.

After an overview of decision techniques, participants learn the statistical foundations of decision making, as well as of appropriate data collection and analysis. Participants next learn the strengths, limitations and practical uses of Single-Attribute Decision Analysis, including uncertainty analysis, expected value (EV) and sensitivity analysis. A challenging group workshop instills the proper use of these techniques.

Participants then practice using modern theories and software for Multiple-Attribute Decision Making and Networking. Small groups apply and report the results for a "capstone" problem that involves all concepts learned throughout the course. The class concludes with discussions of modern decision applications and references, and the advantages of additional risk techniques to aid in decision-making.

Risk Analysis Course ("RAC," ALMC-RB):

Provides DAC graduates with additional insights and more sophisticated abilities to solve decision problems involving "uncertain" data or risky conditions. (DAC or Equivalent is the Prerequisite.)

Major Topics: Brief Review of Decision Analysis Techniques--and their Limitations; Risk Management and Analysis Techniques (including Risk Worksheets, Conditional Probability, Simulation, and Modern Networking and Risk Software); D/RA Trends.

Following an overview of decision techniques (and their limitations for risk analysis), participants learn several risk-management and statistical techniques, including Risk Worksheets and the Expected Value of Imperfect/Sample Information. Participants then learn the uses and limitations of computer simulation. Along the way, teams of participants will solve, report and discuss two increasingly difficult "real world" exercises and discuss various modern techniques and problems of risk and decision analysis.

Classes generally meet 0800 to 1630 hours (that is, 8:00 a.m. to 4:30 p.m.) daily with an hour for lunch-EXCEPT the First Day of DAC starts at 0900; and the Last Day of RAC ends at 1100.

A Follow-on Course in <u>Advanced D/RA</u> (ISSTS-ADRA) is Available on Demand. Each participant brings a "real life" work problem and non-classified data for use during this one-week class, and has exclusive use of a classroom PC during the course. (DAC and RAC are Prerequisites, or Course Director waiver.)

Get Further information at http://www.almc.army.mil/sed/almc-da/index.asp OR Dr. George Huntley, 804-765-4265/4633, DSN 539-, FAX –4648; HUNTLEYG@LEE.ARMY.MIL